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Preserving Idols in Stained Glass: Conservation Assessment of Napier Waller's Stained-Glass Windows at the Australian War Memorial

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Préserver les idoles dans le vitrail : évaluation de la conservation des vitraux de Napier Waller au Mémorial australien de la guerre – Résumé

Créées en 1947, la jeunesse relative des vitraux commémoratifs du 'Hall of Memory' du Mémorial australien de la guerre, à Canberra, signifie qu'ils sont physiquement stables pour le moment. Comprendre l'identité des vitraux est essentiel pour travailler à leur conservation future. Les éléments clefs ayant une signification particulière, comme le symbolisme esthétique et la fonction commémorative des vitraux, ont été identifiés et situés dans la nature physique des vitraux. Une analyse du cycle de vie des

matériaux complexes s'appuyant sur la littérature et les normes internationales a abouti à l'établissement des priorités pour la conservation des vitraux. La stratégie de conservation qui en résulte cherche à atténuer les risques et à fournir des opportunités pour améliorer la valeur des vitraux grâce à une gestion de la conservation appropriée et à une intervention sur le long terme. L'identité significative et complexe de ces vitraux, combinée au potentiel de croissance de l'expertise en conservation des vitraux en Australie, donne aujourd'hui à cette recherche une pertinence pour éclairer les stratégies de conservation dans les années à venir.

Preserving Idols in Stained Glass: Conservation Assessment of Napier Waller's Stained-Glass Windows at the Australian War Memorial – Abstract

Created in 1947, the relative youth of the commemorative windows in the Hall of Memory at the Australian War Memorial, Canberra, means they are physically stable for now. Understanding the identity of the stained-glass windows is vital for their future preservation. Key elements of significance of the stained glass, including aesthetic symbolism and commemorative function, were identified and located in the physical nature of the lights. A life-cycle

analysis of the complex materials with reference to international literature and standards culminated in establishing the priorities for conserving the windows. The resulting conservation strategy seeks to mitigate risks and provide opportunities to enhance the windows' value through appropriate conservation management and intervention in the long term. The windows' significant and complex identity combined with the potential for growth in stained glass conservation expertise in Australia give this research relevance today to inform conservation strategies in the coming years.

Introduction

The stained-glass windows built into three walls of the Hall of Memory (HoM) at the Australian War Memorial are unique and nationally significant artworks that require a specific conservation strategy. Commissioned by the Memorial Board in 1937, and championed by the Memorial's founders Colonel J.L. Treloar and C.E.W. Bean, the windows were created in collaboration with First World War (WWI) veteran and prominent artisan Mervyn 'Napier' Waller.¹ Fifteen lancets are each painted with a unique figure idolising the Australians who served in WWI. Meaning is imbued in each figure by the use of symbolic imagery, all crafted in an illuminating art-deco rectilinear design.

Due to the long lifecycle of the materials, the windows' condition have not been monitored regularly. However, in taking a long term view of their preservation, it was essential to determine the identifying traits to inform priorities for future conservation activities. Understanding significance embodied in materials, deterioration processes, and stained glass conservation practice were the core elements of this research.

This study investigated the integrity of material and non-material aspects significant to the value and longevity of the stained-glass windows using several sources of data. The approach was based on desk research, followed by examination of the windows, consultation with stakeholders, and a discussion of considerations to support the Memorial with informed decision-making.

¹ Jennifer WELLINGTON, *Exhibiting War: The Great War, Museums and Memory in Britain, Canada and Australia*, Cambridge University Press, Cambridge, 2017, p. 278.

Research Background

Several factors have constrained conservation attention for these windows. Firstly, historical condition and conservation documentation within the Memorial was sporadic and diffuse. Secondly, as artistic architectural decorations, stained-glass windows are awkwardly placed between the disciplines of heritage architecture and fine art. Thirdly, decision-making regarding stained glass conservation in Australia has been limited by the complexity of the material and its significance, and the lack of a national body of stained glass conservation guidelines.² These gaps in understanding formed the foundation for this research.

Creating the Windows

Waller was an academy-trained artist, who fought in the First Australian Imperial Force, and lost his dominant arm in the battle of Bullecourt, France during WWI. He went on to train in Victorian Arts and Crafts stained glass techniques at the Tower of Glass studio in Dublin, United Kingdom, and then mosaic craft in Italy in the late 1920s. He was engaged by the Australian War Memorial's founders to decorate the focal point of the building with commemorative artwork to evoke a sense of spiritual connection and tribute to those who served and died in WWI.

Waller designed the figures under the direction of the Memorial's board and founders. High-grade³ leads were used, along with Antique flashed glass sourced from Miller, Beal & Hider Ltd, in London as early as 1940.⁴ The panes were hand-painted by Waller in several layers with assistance from his wife Christian Waller, who was an independent stained glass artist, then assembled by a local glazier. The three lights are 5.2 by 7.4 meters each, and consist of approximately 9000 panes of glass (fig. 1).

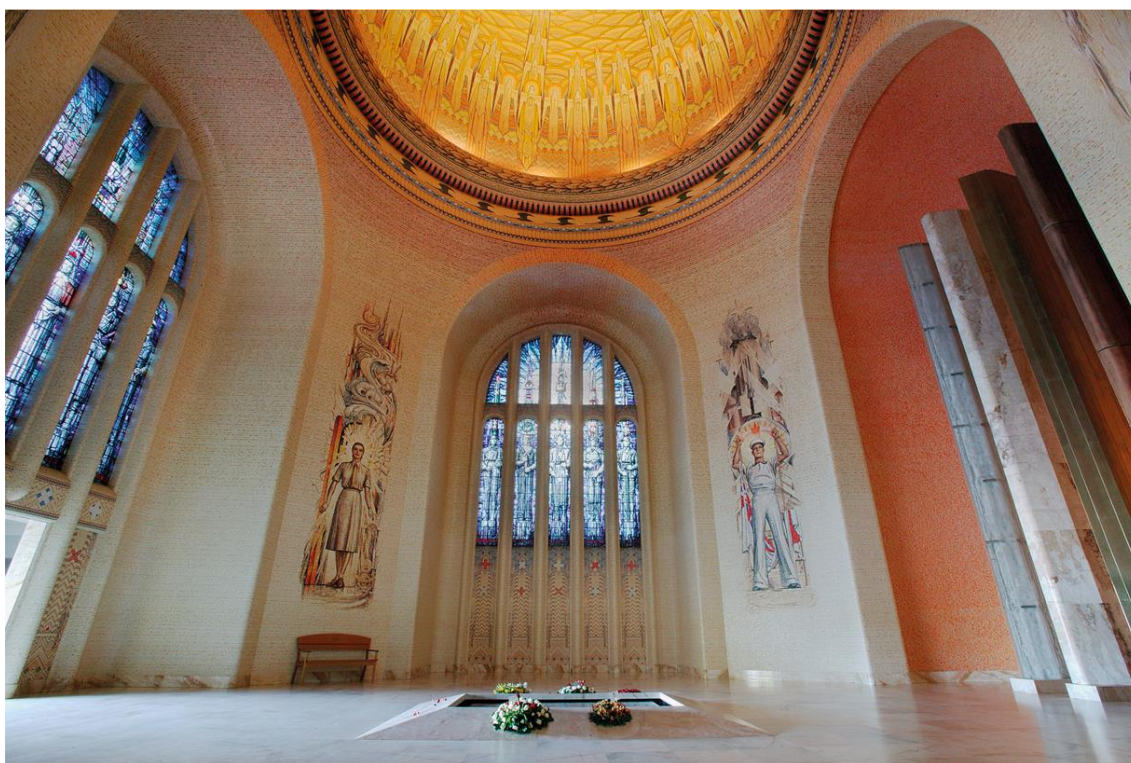


Fig. 1. Australian War Memorial, Hall of Memory stained-glass windows, west bay, interior. © AWM, 2011.

² Bronwyn HUGHES, *Stained Glass Conservation and Restoration Research and Workshop Practice in USA, Britain and France*, Bronwyn Hughes [unpublished], 1994.

³ XRF Analysis by J. Jordan and G. Bailey 2018 confirmed the composition is akin to modern “restoration grade” leads specified by The Stained Glass Association of America (SGAA), *Standards And Guidelines For The Preservation Of Historic Stained (And Leaded) Glass Windows*, The SGAA, Buffalo, NY, 2012.

⁴ The Australian War Memorial (AWM), *File Rn: 234/005/013: Purchase Of Glass For Stained-glass windows In The Hall Of Memory*, Australian War Memorial, 13/05/1939.

Significance of the Windows

The stained-glass windows embody the culmination of Napier Waller's and Australia's experience and mourning of the FWW. They are some of the largest memorial windows in Australia, being unique in their use of iconographic representation of common people serving in war.

The windows were created following the tradition of memorialization in stained glass. Waller's training links the artwork to the Arts and Crafts movement in the UK and Europe, and are extraordinarily executed in a characteristically art deco style. The artists' intent and cultural context have been preserved and continue to provide perspective into both the national consciousness of post-war Australia and current commemorative culture.

Dilemma and the Focus of Conservation

The original fabric holds undeniable significance, and should be preserved. However, the point of unacceptable damage must be defined to determine the point at which materials are repaired or reconstructed and to what degree. Ethical and theoretical approaches were explored to understand the tension between maintaining the functional requirements of the windows and traditional ideas of authenticity embodied in original fabric.

Two determinants of significance are considered vital here in considering replacement or restoration of original materials. Firstly, the significance of the stained-glass windows is not exclusively dependent



on the original fabric, but on the symbolic function as part of the HoM. This priority is inherent in the creator's intent and must be respected in establishing the ideal state.⁵ Secondly, as the architectural context is critical to the windows' significance, and failure of the building fabric has the potential to damage the stained glass, the windows will require relatively frequent and interventive conservation to maintain their significant attributes. As such, conservation must retain significance held within the painted image as embodiment of symbolic identity and physical stability as embodiment of functional identity. This will minimise the impact of deterioration of original fabric on deterioration of the windows integrity and authenticity of significance.

Lifecycle Analysis

To determine the primary risks to the preservation of the stained-glass windows, the deterioration mechanisms were identified and the lifecycle of each major component examined. This included review of both historical documentation and current condition assessment with materials analysis by the researcher and colleagues. Literary review included examination of the production techniques and materials of the Arts and Crafts tradition along with Waller's own methods (Memorial archives), followed by investigation of two historical condition reports.⁶

Fig. 2. Australian War Memorial, Hall of Memory stained-glass windows, west bay, exterior, Loyalty, showing iridescence on panels 3 to 5, taken by J.Jordan, 5 July 2018.

⁵ Barbara APPELBAUM, *Conservation Treatment Methodology*, Barbara Appelbaum, Lexington, Kentucky, 2010.

⁶ Sue BASSET, 'Stained-glass windows in the Hall of Memory', Condition Report in *Conservation of Stained-glass windows in Hall of Memory*, AWM file RN: 89/0435, 29/01/1989, Australian War Memorial [unpublished], 1989.

The current condition was assessed visually and instrumentally with climate monitoring and materials analysis (including X-ray Fluorescence and Fourier Transform Infrared). All activities were compiled and thoroughly documented for future reference including photographic overlays, supported by a discussion of the potential type and timeline of future points of failure.

Overall the windows are in a fair condition. The painted surface displays some frying (currently stable), minor iridescence (fig. 2), and several broken panes. Interestingly, the metallurgy of the leads has resulted in the solder joints failing preferentially (contrary to common deterioration of the leads around the joints).⁷

Conservation Needs

The defining elements of the artwork include the visual functions of artistic and symbolic depth, and the ceremonial function in the architectural context of the HoM, where Australia's Unknown Soldier is entombed. Hence, the windows must be retained in situ, and the risks of the architectural environment must be accepted and managed where possible. Risks to the loss of intangible significance hinges on the maintenance of education and ceremonial programs. Preservation is recommended through regular condition surveys to monitor ongoing changes, preventive maintenance to preserve existing materials, and conservation interventions to restore and reconstruct the painted image (judged from normal viewing distance) and stabilise of structural components.

Stakeholder interviews indicated an enthusiasm and commitment of Memorial staff to ensure all necessary preservation steps are taken. Interventions required over the next three years will include exterior cleaning, putty replenishment, glass and solder crack stabilisation. Monitoring programs will include putty condition monitoring, vibration monitoring for future major construction that is the Memorial Development Project (2020-2027), in addition to biennial condition surveying (for the first 5 years to assess deterioration rates), further deterioration product identification, and spot cleaning to minimise damage from pest activity.

Conclusions and further research

This study informs conservation management decision-making by discussing the identity of the stained-glass windows, their significance, the necessities of their architectural context, their physical lifecycle, and the opportunities and restraints of their management. The recommendations highlight the priorities for conservation, appropriate preventive monitoring and maintenance, and potential challenges for the future.

Future research is encouraged to further develop ethical theory of architectural artworks, and develop stained glass best practice for Australia. National resources and information are scarce and further exploration is required to develop an appropriate framework to preserve significant stained glass works such as these.

Authorship and Acknowledgements

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⁷ Rolfe ACHILLES & Neal VOGEL, 'The Preservation and Repair of Historic Stained and Leaded Glass', *33 Preservation Briefs*, Heritage Preservation Services, National Parks Service, U.S. Department of the Interior, 2007.